## RUWENZORI EXPEDITION REPORTS.

## 12. LEPIDOPTERA RHOPALOCERA.

By F. A. Heron.<br>Received and read November 17, 1908.

[Plate V.*]

The collection of Lepidoptera Rhopalocera, consisting of about a thousand specimens belonging to (roughly) 170 species, of which eight are new to science, was made by the Hon. Gerald Legge and Mr. A. F. R. Wollaston.
The most abundant species, of which series of more than 20 examples were taken, were Mycalesis matuta, Salamis anacardii nebulosa, Uranothauma delatorum, Castalius margaritaceus, Cyclyrius aquatorialis, Azanus natalensis, and Nychitona medusa.

The eight new species belong respectively to the genera Gnophodes, Acrceu, Charaxes, Uranothauma, Harpendyreus (Lycænidæ), Oxypalpus, Ceratrichia, and Chioneigia (Hesperiidæ). In addition to these, five new varieties or subspecies are here described.

To the list of species collected by the Ruwenzori Expedition have been added the species collected by Mr. G. F. Scott Elliot in the same district, as well as a few taken by Prof. E. A. Minchin, Mr. W. G. Doggett, Mr. F. J. Jackson, and Sir H. H. Johnston.


* For explanation of the Plate, see p. 178.
vol. xix.-part il. No. 19.-December, 1909.


# Family Nymphalide. 

## Subfamily Danaine.

Amauris grogani.
Amauris grogani E. M. Sharpe, Ann. \& Mag. N. H. ( $\boldsymbol{\text { r }}$ ) viii. p. 278 (1901).
1 ơ. Mubuku Valley, E. Ruwenzori. $6000-13,000 \mathrm{ft}$. 13. ii. 06.
1 ㅇ. Kasamaza's, Ruwenzori. 5300 ft. 18-23. iv. 1895. (G. F. Scott Elliot.) (As Amauris albimaculata Butler, ㅇ, P. Z. S. 1895, p. 722.)

Amauris echeria jacksoni.
Amauris jacksoni E. M. Sharpe, P. Z. S. 1891, p. 633, pl. xlviii. f. 2.
1 ơ. Between Kivata and Luimi, Ruvenzori. 7000-8000 ft. May or June 1905. (G. F. Scott Elliot.) (As Amauris albimaculata Butler, of, P. Z. S. 1895, p. 722.)
$9 \delta^{\circ} \delta^{\circ}$. Mubuku Valley, E. Ruwenzori. 6000-13,000 ft. 7, 13. i. \& 5. ii. 06.
2 오. , , ", 14.i.\&11.ii.06.
Amadris ellioti.
Amauris ellioti Butler, Ann. \& Mag. N. H. (6) xvi. p. 122 (1895)).
1 ot $^{*}$ Ruwenzori. 5600 ft . (G. F. Scott Elliot.)
11 ơ $^{\circ}$. Mubuku Valley, E. Ruwenzori. 7. i., 5. ii.. \& 16, 17. iii. 06.

Danais (Tirumala) petiverana.
Danais limniace var. petiverana Doubl. \& Hew. Gen. Diurn. Lep. i. p. 93 (1847).
2 ö ơ, 2 우. Mokia, S.E. Ruwenzori. 3500 ft. 26. i., 5. ii., \& 1, 17. v. 06.
Danais (Limnas) chrysippus.
Papilio chrysippus Linn. Mus. Lud. Uir. p. 263 (1764).
forma chrysippus.
4 ธ̛ ${ }^{\circ}$. Mubuku Valley, E. Ruwenzori. $6000-13,000 \mathrm{ft}$. 26. i. 06.
3 ㅇ ㅇ. Mokia, S.E. Ruwenzori. 3500 ft . 25.iv. 06.
forma dorippus.
Danais dorippus Klug, Symb. Phys. t. 48, text (1845).
2 오. Mokia, S.E. Ruwenzori. 3500 ft. 27.iv. 06.
forma alcippus.
Papilio alcippus Cram. Pap. Ex. ii. t. 127. ff. E, F (1779).
1 ơ. Mubuku Valley, E. Ruwenzori. 6000-13,000 ft. 25. i. 06.
1 ㅇ. Mokia, S.E. Ruwenzori. 3500 ft. 19. iv. 06.

## Subfamily Satyrina.

Grophodes grogani. (Plate V. figs. 1, ơ ; 2, ㅇ. .)
Gnophodes grogani E. M. Sharpe, Ann. \& Mag. N. H. (7) viii. p. 279 (1901).
$4 \delta^{\circ}$ ơ . Mubuku Valley, E. Ruwenzori. 25. i. \& 13. ii. $06 . ~_{0}$
3 오. $\quad$., 5.ii. 06.
Belongs to the section with the of sex-tuft covering nearly two-thirds of the interspaces between the submedian and second median branches of the fore-wing.

The female-hitherto unrecorded-is, except for the absence of the tuft, generally like the male, but the ground-colour is a little paler, and, as is usual in the genus, the transverse band on the upperside of the fore-wing is nearly twice the width of that in the male.

Grophodes parmeno. (Plate V. fig. 10.)
Gnophodes parmeno Doubl. \& Hew. Gen. Diurn. Lep. pl. lxi. f. 2 (1851).
1 f. Mokia, S.E. Ruwenzori. 3500 ft. 16. vi. 06.
Gnophodes minchint, sp. n. (Plate V. fig. 3, ơ .*)
Expanse: 70 mm . at vein 8 .
o. -Upperside. Fore-wing deep sepia-brown varying to tawny-olive, the colour being lightened on the basal half by dense mouse-coloured hairs ; the external margin with a sprinkling of grey scales; the ouly marking consists of a curved ill-defined subapical band of dull ochraceous-rufous scaling, extending from the costa (where it is most pronounced) to the middle of the external margin. Hind-wing similar in colouring to the fore-wing, but without ochraceous markings, and with a large elliptical sex-patch of cream-white scales lying near the costa and normally hidden by the forewing ; this patch is 11 mm . long, being three-quarters of the length of the cell.

Underside. The markings closely similar to those of G. chelys Fab. (Plate V. fig. 8), but the brown colouring is varied with a pinker hue than is usual in the genus. Fore-wing as in G. chelys, but the sex-patch of cream-white scales is longer and does not extend below vein 1. Hind-wing differs from that of G. chelys in that the curved median line is more sinuous than zigzag and is less varied with pale blotches.
This species is further readily distinguishable from its closest ally, $G$. chelys, by the following structural characters :-

Fore-wing more nearly approximating an equilateral triangle in shape, the costa being proportionately shorter and the external margin proportionately longer; the length of the cell is therefore relatively greater as compared with the wing-length; the angulation of the wing at vein 8 is more obtuse and the projection at 6 more acuminate, while that at 3 is hardly noticeable. Vein 1 is strongly curved and

* For figure of fore-wing of Gnophodes diversa Butler, ơ, see Plate V. fig. 9.
subparallel with the internal margin, which forms a regular convex curve; whereas in G. chelys vein 1 is much straighter, while the internal margin is slightly sigmoid, that is, with an S-like curvature; finally, the lower discocellular is less incurved, so that the lower distal angle of the cell is much less acute. Hind-wing with the angulation at vein 3 less pronounced and the distal angle of the cell less acute.

Hab. Uganda.
2 ơ ${ }^{\circ}$. Entebbe, Uganda. (Prof. E. A. Minchin.)
Grophodes minchini, forma $n$. magniplaga. (Plate V. fig. 4, of.)
This remarkable form, of which a single specimen was taken in the Mubuku Valley, E. Ruwenzori, on Feb. 13, 1906, at a height of $6000-13,000$ feet, is conspicuous for the great size of the sex-patches. That on the hind-wing approximately equals the area of the cell ( $14 \times 5 \mathrm{~mm}$.), and extends to an equal distance from the base, the colour of the component scales being rather more creamy than in the typical form. The patch above vein 1 on the underside of the fore-wing measures 13 mm . in length, and is more acuminate externally than in $G$. minchini.

Melantitis leda.
Papilio leda Linn. Syst. Nat. ed. x. p. 474 (1758), ex parte.
$4 \delta^{\circ}$ ơ, $^{1}$ ㅇ. Mubuku Valley, E. Ruwenzori. $6000-13,000 \mathrm{ft}$. 30.i. \& 20. ii. 06. Unocellate form.
1 or $^{*} 4$ 우 ㅇ. Mokia, S.E. Ruwenzori. 3500 ft . 30.iv. \& 12. r. 06.
Ocellate form.
1 ơ. Mokia, S.E. Ruwenzori. 3500 ft . 12. v. 06.
Fulvescent form.

## Mrcalesis dentata.

Mycalesis dentata E. M. Sharpe.
6 o ot $^{2}$ 오 ㅇ. Mubuku Valley, E. Ruwenzori. 6000-13,000 ft. 16, 24, 29. i. \& 2, 5.ii. 06 .

1 ©. Kivata, Ruwenzori. 6000-8000 ft. (G. F. Scott Elliot.)
Mycalesis (Monotrichtis) angulosa.
Mycalesis angulosa Butler, Cat. Satyr. Brit. Mus. p. 130, t. 3. f. 8 (1868).
1 ơ. Mubuku Valley, E. Ruwenzori. $5000-7000$ ft. 9.i. 06.
2 of ot. Mokia, S.E. Ruwenzori. 3000-5000 ft. 22. v. 06.
Mycalesis safitza.
Mycalesis safitza Hew. Gen. Diurn. Lep. ii. p. 394 note, t. 66. f. 3 (1851).
4 웅, 2 오 ㅇ. Mokia, S.E. Ruwenzori. 7, 9, 10.v. 06.

## Mycalesis vulgaris?

Mycalesis vulgaris Butler, Cat. Satyr. Brit. Mus. p. 130, pl. 3. f. 2 (1868).
2 o $^{*}$. Kivata, Ruwenzori. 6000-8000 ft. (G. F. Scott. Elliot.)
1 ㅇ. Kasamaza's, Ruwenzori. 5300 ft . (G. F. Scott Elliot.)

Micalesis campina.
Mycalesis campina Aurivillius, Ent. Tidskr. xxii. p. 114 (1901).
1 о́. Mokia, S.E. Ruwenzori. 3500 ft . 10.v. 06.
2 ơ ơ. Kasamaza's, Ruwenzori. $5300 \mathrm{ft} .13-23 . \mathrm{iv} 06$. (G. F. Scott. Elliot.) (As Mycalesis technatis Hew. fide Butler, P. Z. S. 1895, p. 723.)

## Mycalesis saga.

Mycalesis saga Butler, Cat. Satyr. Brit. Mus. p. 130, t. 3. f. I (1868).
1 ơ. Mokia, S.E. Ruwenzori. 3500 ft. 19. v. 06.

Mrcalesis matuta.
Mycalesis matuta Karsch, Fnt. Nachr. xx. p. 228 (1894).
 $13,000 \mathrm{ft} . \quad 8,25$. i. \& 16. iii. 06.

## Mycalesis saussurei.

Mycalesis saussurei Dewitz, Nov. Acta Ac. N. Cur. xli. (2) no. 2, p. 17, t. 1. f. 9 (1879).
1 우. Ruwenzori. 5000 ft . ix. 1900. (Sir H. H. Johnston.)

Mrcalesis aurivillif.
Mycalesis aurivillii Butler, P. Z. S. 1895, p. 724.
5 ơ ${ }^{\star}$. Mubuku Valley, E. Ruwenzori. $6000-13,000 \mathrm{ft}$. 14.i. 06.
$3 \sigma^{\star o}$. Kivata, Ruwenzori. $6000-8000 \mathrm{ft}$. (G. F. Scott Elliot.)

Henotesia perspicua.
Mycalesis perspicua Trimen, Trans. Ent. Soc. Lond. 1873, p. 104, t. 1. f. 3.
6 ठ๐ ठै, 1 ㅇ. Mokia, S.E. Ruwenzori. 3500 ft 5, 10, 12. v. 06.
1 o. Ruwenzori. 5000 ft. ix. 1900. (Sir H. H. Johnston.)
Henotesia sp.
2 specs. Kivata and Kasamaza's, Ruwenzori. $6000-8000 \mathrm{ft}$. (G. F. Scott Elliot.)
Two very worn specimens.
vol. xix.-part iI. No. 20.-December, 1909.

Neocenyra gregoril.
Neocenyra gregorii Butler, P. Z. S. 1894, p. 560, pl. xxxvi. f. 2.
1 \%. Ruwenzori. 5600 ft. (G. F. Scott Elliot.)
1 o. Kivata, Ruwenzori. 6000-8000 ft. (G. F. Scott Elliot.)
I'phthima itonia.
Yphthima itonia Hew. Trans. Ent. Soc. ser. 3, vol. ii. p. 287, pl. 18. f. 13 (1865).
4 ठo $^{\circ} 0^{\prime}, 1$ ㅎ. Mokia, S.E. Ruwenzori. 3500 ft . 17. v. 06.
1 o. Mubuku Valley, E. Ruwenzori. $6000-13,000 \mathrm{ft}$. 24.ii. 06.

Yphtilima albida.
Ypthima albida Butler, P.Z. S. 1888, p. 59.
8 ơ $^{\circ}$. Mubuku Valley, E. Ruwenzori. 6000-13,000 ft. 3, 9. i. 06.
1 ó. Kivata, Ruwenzori. $6000-8000 \mathrm{ft}$. (G. F. Scott Elliot).
1 o, 1 ㅇ. Kasamaza's, Ruwenzori. 5300 ft 13-23. iii. (G. F. Scott Elliot.)
1 ठ'. Ruwenzori. 5000 ft . ix. 1900. (Sir H. H. Johnston.)

Ypethima simplicia.
Ypthima simplicia Butler, Ann. \& Mag. N. H. (4) xviii. p. 481 (1876).
3 ot ơ, 2 우 ㅇ․ Mokia, S.E. Ruwenzori. 3500 ft. 16.iv. \& 2, 10. v. 06.
A very large form : expanse of largest female, 42 mm .

## Subfamily Acreine.

Planema latifasciata.
Planema latifasciata E. M. Sharpc, P.Z. S. p. 635, pl. xlviii. f. 6 (1891).
2 ơ ơ, 9 오. Mubuku Valley, E. Ruwenzori. $5000-13,000 \mathrm{ft}$. 30. xii. 05 , 4. i. \& 5.ii. 06.

Acrea sotikensis.
Acrea sotikensis E. M. Sharpe, P. Z. S. 1891, p. 634, pl. xlviii. f. 1 (1891).
13 or $^{\text {or, }} 2$ 오 ㅇ. Mubuku Valley, E. Ruwenzori. $5000-16,000 \mathrm{ft} . ~ 9, ~ 17, ~ 20 . ~ i . ~ 06 . ~$ 4 - ${ }^{\circ}$ ơ. Kasamaza's, Ruwenzori. 5300 ft . 13-23. iv. (G. F. Scott Elliot.)

Acrea alicia.
Acrea alicia E. M. Sharpe, Ann. \& Mag. N. H. (6) v. p. 442 (1890).
1 ơ. Mokia, S.E. Ruwenzori. 3500 ft. 16. vi. 06.

Acrifa uveli.
Acrea uvui Smith, Ann. \& Mag. N. H. (6) v. p. 168 (1890).
$18 \delta^{\circ} \delta^{\circ}, 1$ ㅇ. Mubuku Valley, E. Ruwenzori. $5000-7000 \mathrm{ft}$. 31. xii. 05 ; 13. i. \& 5. ii. 06.

1 o'. Kasamaza's, Ruwenzori. 5300 ft . 13-23.iv. (G. F. Scott Elliot.)
Acrea viviana.
Acrea viviana Staudinger, Iris, p. 204 (1896).
1 ㅇ. Mokia, S.E. Ruwenzori. 3500 ft. 17. v. 06.
Acrean acerata, forma vinidia Hew.
Acrea acerata Hewitson, Ann. \& Mag. N. H. (1) xiii. p. 381 (1874).
Acraa vinidia Hew. Ent. Mo. Mag. xi. p. 130 (1874).
1 ơ, 1 ㅇ. Mokia, S.E. Ruwenzori. 3500 ft. 1, 14. v. 06.

## Agrea terpsichore.

Papilio terpsichore Linn. Syst. Nat. ed. 10, p. 466 (175ั8).
Papilio serena Fabr. Syst. Ent. p. 461 (1775).
2 ot ơ, 1 ㅇ. Mokia, S.E. Ruwenzori. 3500 ft. 22. v. \& 16. vi. 06.
The males belong to the form described as $A$. rougetii Guérin, while the female is inseparable from some examples of $A$. manjaca Boisd. from Madagascar.

## Acrea encedon.

Papilio encedon Linn. Syst. Nat. ed. 10, p. 488 (1758).
2 ơ ơ. Mokia, S.E. Ruwenzori. 3500 ft. 26. iv. \& 5.v. 06.
2 오. Mubuku Valley, E. Ruwenzori. 6000-13,000 ft. 20, 26. i. 06.
1 ơ. Kasamaza's, Ruwenzori. 5300 ft . 13-23.iv. (G. F. Scott Elliot.)
The typical form A. encedon Linn., the pale form A. lycia Fab., and the form A. alcippina Aurivillius are all represented.

## Acrea iturina.

Acrea iturina Grose Smith, P. Z. S. 1890, p. 465.
1 ㅇ. Mubuku Valley, E. Ruwenzori. 6000-13,000 ft. 26.i. 06.
$1 \delta^{\circ}$. Kivata, Ruwenzori. 6000-8000 ft. v. (G. F. Scolt Elliot.)
Acrea lycoa.
Acrea lycoa Godart, Enc. Méth. ix. p. 239 (1819).
1 ㅇ. Semliki Valley. 10. viii. 06.

Acrea toruna.
Acrea toruna Grose Smith, Nov. Zool. vii. p. 546 (1900).
1 ơ. Mubuku Valley, E. Ruwenzori. 5000-7000 ft. 15.i. 06.
1 o. Kasamaza's, Ruweuzori. 5300 ft . 13-23. iv. (G. F. Scott Elliot.)
1 ㅇ. Kivata, Ruwenzori. $6000-8000 \mathrm{ft} . \quad$ v. (G. F. Scott Elliot.)

## Acrea disjuncta.

Acrea disjuncta Grose Smith, Nov. Zool. v. p. 3 ã 1 (1898),
3 ơ ơ. Mubuku Valley, E. Ruwenzori. 6000-13,000 ft. 24. ii. 06.
Acrea asboloplintha.
Acrea asboloplintha Karsch, Ent. Nachr. xx. p. 223 (1894).
10 ơ $^{\circ}, 1$ ㅇ. Mubuku Valley, S.E. Ruwenzori. $6000-13,000 \mathrm{ft} .31$. xii. 05 ; 17,26 i. 06 .

Mokia, E. Ruwenzori. 3500 ft. 24.v. 06.
1 ơ. Ruwenzori. 7000 ft. ix. 1900. (Sir H. H. Johnston.)
Acrea Pelasgius.
Acrea pelasgius Grose Smith.
1 ठ. Semliki Valley. 15. viii. 06.
Acrea amicitle, sp. n. (Plate V. fig. 11, ơ.)
Expanse: 55-62 mm.
Structure.-Fore-wing slightly arched costally, the external margin being a little concave and the internal nearly straight. The greatest breadth is about half the costal length, and the external and internal margins are subequal, being about two-thirds of the length of the costa. Hind-wing with the costal margin almost straight, the external margin sub-semicircular to the tornus, whence the internal runs straight till near the body, where it curves sharply to the base.
© .-Upperside. Colour rosy-orange, deeper on the hind-wing and with black markings; cilia black. Fore-wing with the costal margin black, except for a short orange line at the base; the space between vein 11 and the costal nervure orange dusted with black; the apical area, beyond the line formed by vein 3 and the end of the cell, black, with a small subquadrate orange patch between veins 3 aud 4 , and a semitransparent subapical band formed of 5 contiguous spots lying between veins 4 and 11 ; of these spots those between vein 4 and the stalk of veins $7-9$ are large, more or less transparent, and dusted with orange scales, while those between the stalk and vein 11 are small, elongate, and ill-defined markings of orange scales; the inner margin has a broad border of black scaling, which extends a little beyond vein 1 , especially near the base; the external border below vein 3 is also broadly black, which
colour extends inwards along vein 2 ; this border is marked throughout with narrow orange streaks between the veins, those between 2 and 4 being most distinct and uniting with the discal orange markings, while the apical streaks are more or less evanescent; beyond the middle of the cell is a large subquadrate black patch, and the proximal corner of space 2 is filled in with a large triangular black patch, which is continued from its lower angle as a transverse bar across space 1 in a direction parallel to the external margin. Hind-wing with an angulated double row of black spots at about one-third from the base, but with most of the spots obscured by two suffusions of black scales radiating from the base; the upper of these occupies the base of space 8 , the lower extends longitudinally for about three-fourths of the cell-length and transversely from the lower part of the cell to the inner margin; the hind border may be described either as orange with short black streaks on the veins, which tend to fuse together internally so as to form a broad, more or less continuous, black submarginal band; or the border may be described as broadly black, with rounded orange spots between the veins.

Underside. Fore-wing with the upperside markings showing through, but with the dark orange replaced by flesh-pink, and with a distinct double black spot at the end of the cell; the borders of the wings greyish, the external border with pale orange inter-nervular streaks. Hind-wing generally pale pinkish, darker between the discal rows of spots, bluish-grey externally, and with pale orange triangular inter-nervular patches, the veins narrowly darkened distally; the double row of black spots shows up very clearly, being bent at right angles between veins 5 and 6 ; the spots occur as follows: one in space $1 a$; two in $1 b$; two in $1 c$, the outer one being $V$-shaped; one in the inner angle of space 2 ; two larger ones in the apical part of the cell; two in space 5 ; one in 6 ; and two larger ones in 7 .

The head, thorax, and legs dorsally black, with the usual yellow spots. The abdomen black, the segments having their posterior margins and a rounded spot on each side pale yellow; the ventral surface yellow, with a dark median stripe. Palpi ochraceous, with stiff black hairs. Antennæ black, a little less than half the length of the costa, the ovate flattened club being one-sixth the length of the shaft.

Hab. E. Ruwenzori.
$11 \delta^{\circ} \delta^{*}$. Mubuku Valley, E. Ruwenzori. $5000-13,000 \mathrm{ft} . \quad 24$. ii. \& 16, 17. iii. 06.
The banding of the hind-wings recalls that of $A$. baxteri Sharpe (of which only females have been seen by me), but the angulation of the hind-wing band is at interspace 3 in A. baxteri and 5 in A. amicitice. In both species the distribution of the red and the black at internal margin of the hind-wing is similar, and the shape of the fore-wing is what might be expected in forms of different sexes.

## Subfamily Nymphalines.

Argynnis excelsior.
Argymis excelsior Butler, P. Z. S. 1895, p. 729 , pl. xlii. f. 4.
S of ơ, 3 오. Mubuku Valley, E. Ruwenzori. $5000-13,000 \mathrm{ft}$ 15, 24. i. \& 23. iii. 06.
12. $\sigma^{\circ}$ or and 오 ㅇ. Ruwenzori. $5600-9000 \mathrm{ft}$. (G. F. Scott Elliot.)

Hypolimnas salmacis platydema.
Papilio salmacis Drury, Ill. Ex. Ins. ii. p. 14, t. 8. ff. 1, 2 (1773).
Hypolimnas salmacis platydema Rothschild \& Jordan, Nov. Zool. x. p. 524 (190~).
1 ot. Mokia, S.E. Ruwenzori. 3500 ft . 17. iv. 06.

## Hypolimias anthedon.

Diadema anthedon Doubleday, Ann. \& Mag. N. H. xvi. p. 181 (1845).
1 ㅇ. Mubuku Valley, E. Ruwenzori. $6000-13,000 \mathrm{ft} .6$. i. 06.
Hypoliminas misippus.
Papilio misippus Linn. Mus. Lud. Ulr. p. 264 (1764).
6 os $\mathrm{o}^{\circ}$. Mokia, S.E. Ruwenzori. 3500 ft . 17. iv. 06.
1 ơ. Mubuku V'alley, E. Ruwenzori. 6000-13,000 ft. 29. i. 06.

## Vanessula milca buchneri.

Liptena milca Hewitson, Ex. Butt. v. Pentila \& Liptena, pl. ii. f. 17, text (1893).
Vanessula buchneri Dewitz, Ent. Nachr. xiii. p. 14̄̄, figs. (1887).
1 ㅇ. Nokia, S.E. Ruwenzori. 3500 ft. 27. vi. 06.
Antanartia scheneia.
Furema scheneia Trimen, Trans. Ent. Soc. Lond. 1879, p. 329.
S ठ ठ ${ }^{\circ}, 1$ ㅇ. E. Ruwenzori. 6000-13,000 ft. 7. ii. 06.
2 © ठ . Ruwenzori. 9000 ft . (G. F. Scott Elliot.)

## Antanartia hippomene.

Hypanartia hippomene Hübner, Samml. ex. Schmett. ii. p. 25, ff. 3, 4 (1806).
6 ơ $\delta^{\circ}, 2$ 오 오. Mubuku Valley, E. Ruwenzori. $5000-13,000 \mathrm{ft}$. 28. i. to 3. ii. 06.
3 ơ ${ }^{\circ}, 2$ 오 . Ruwenzori. 6000-9000 ft. (G. F. Scott Elliot.)
Antanartia abyssinica.
Pyrameis abyssinica Felder, Reise der Novara, Lep. iii. p. 397 (1867).
8 of ot. Mubuku Valley, E. Ruwenzori. 5000-13,000 ft. 3, 5. ii. 06.
4 o ठ, 1 우. Ruwenzori. $5000-8000 \mathrm{ft}$. (G.F. Scott Elliot.)

## Catacroptera cloantue.

Papilio cloanthe Cramer, Pap. Ex. iv. p. 93, t. 338. ff. A, B (1781).


## Precis efone.

Papilio cenone Linn. Mus. Lud. Ulr. pp. 274, 275 (1764).
Papilio clelia Cramer, Pap. Ex. i. p. 33, t. 21. ff. E, F (1775).
11 ơ ơ, 2 오. ㅇ. Mokia, S.E. Ruwenzori. 3500 ft. 25, 29, 30. iv. \& 2. v. 06.
Precis hierta cebrene.
Papilio hierta Fabrieius, Ent. Syst. Suppl. p. 424 (1798).
Junonia cebrene Trimen, Trans. Ent. Soe. Lond. 1870, p. 353.
4 of ${ }^{\text {or }}, 2$ 오 우. Mokia, S.E. Ruwenzori. 3500 ft. 17, 26. iv. \& 2, 7. r. 06.

## Precis sophia infracta.

Papilio sophia Fabricius, Ent. Syst. 3, i. p. 248 (1793).
Junonia infracta Butler, P.Z.S. 1888, p. 63.
1 ot. Mokia, S.E. Ruwenzori. 3500 ft . 1. v. 06.
1 ơ. Semliki Valley. 10. viii. 06.
1 ơ. Ruwenzori. (G. F. Scott Elliot.)

## Precis terea.

Papilio terea Drury, Ill. Ex. Ins. ii. p. 32, t. 18. ff. 3, 4 (1773).
9 ơ ơ, 1 ㅇ․ Mokia, S.E. Ruwenzori. 3500 ft. 2, 14.v. 06.
1 б. Mubuku Valley, E. Ruwenzori. $5000-7000$ ft. '23. iii. 06.
Precis pelarga.
Papilio pelarga Fabricius, Syst. Ent. p. 513 (1775).
1 ơ. Mubuku Valley, E. Ruwenzori. 13,000-16,000 ft. 13. ii. 06.
A wet-season form.
Precis milonla.
Precis milonia Felder, Reise Novara, Lep. p. 403 (1867).
1 \&. Ruwenzori. 6000-S000 ft. (G. F. Scott Elliot.)
Precis antilope.
Salamis antilope Feisthamel, Ann. Soe. Ent. Fr. (2) viii. p. 250 (1850).
Precis simia Wallengren, Rhop. Caffr. p. 26 (1857).
2 ơ ठै. Mokia, S.E. Ruwenzori. $3500 \mathrm{ft} . \quad 30$. iv. \& 5. v. 06.
The specimens belong to the wet-season form, $P$. simia.

Precis octatia sesamus.
Papilio octavia Cramer, Pap. Ex. ii. p. 60, t. 135. ff. B, C (1777).
Precis sesamus Trimen, Trans. Ent. Soc. 1883, p. 347.
1 ठ, 1 우. Mokia, S.E. Ruwenzori. 3500 ft . 26.iv. \& 5. v. 06.
The specimens belong to the wet-season form $P$. natalensis Staudinger (Ex. Schmett. p. 101, 1885).

## Precis tegela pyriformis.

Precis tugela Trimen, Trans. Ent. Soc. 1879, p. 334.
Junonia pyriformis Butler, P. Z. S. 1895, p. 726.
 9,17 . i. \& 16. iii. 06.

4 ơ ${ }^{\circ}$. Ruwenzori. $5000-8000 \mathrm{ft}$. (G. F. Scott Elliot.)
Precis stygia gregoril.
Precis stygia Aurivillius, Ent. Tidskr. xv. p. 275 (1891).
Junonia gregorii Butler, P. Z. S. 1895, p. 726.
1 ㅇ. Semliki Valley. 10. viii. 06.
1 ठ. Ruwenzori. $6000-8000 \mathrm{ft}$. (G. F. Scott Elliot.)

## Precis chorimene.

Vanessa chorimene Guérin, Ioon. Rè̀gne Anim., Ins. texte, p. 476 (1844).
12 ठ ठ , 4 우 ㅇ. Mokia, S.E. Ruwenzori. 3500 ft. 30.iv. \& 4.v. 06.
Both the wet- and the dry-season phases are represented in the series taken.
Salamis parhassus ethiops.
Papilio athiops Palisot de Beauvais, Ins. Afr. Amér. p. 22, f. 3 (1805).
$1 \delta^{\circ}, 1$ ㅇ. Mokia, S.E. Ruwenzori. 3500 ft. 16. vi. 06.
1 ơ. Mubuku Valley, E. Ruwenzori. $13,000-16,000 \mathrm{ft}$.

## Salamis anacardil nebulosa.

Salamis nebulosa Trimen, Trans. Ent. Soc. 1881, p. 441.


## Pseldargynnis hegemone nyasse.

Argynnis hegenone Godart, Euc. Méth. ix. p. 258 (1819).
Pseudargynnis hegemone ssp. nyasse Bartel, Nov. Zool. xii. p. 138 (1905).
4 ठ̋ ơ, 1 오. Mubuku Valley, E. Ruwenzori. $5000-13,000 \mathrm{ft}$. 4. i. \& 23. iii. 06.
1 ㅇ. Kasamaza's, Ruwenzori. 5300 ft. Between 13 \& 23.iv. (G.F. Scott Elliot.)

## Catuna angustatua.

Euomma angustatum Felder, Reise Novara, Lep. iii. p. 425 (1867).
1 ठ. Fort Beni, Semliki Valley. 21. vii. 06.

Aterica galene extensa, subsp. n.
Papilio galene Brown, New Ill. of Zool. p. 94, t. 37 (1776).
13 ơ ơ, 2 우 ㅇ. Mokia, S.E. Ruwenzori. 3500 ft . 16, 17. vii. 06.
These specimens seem to belong to a local form, differing constantly from the WestAfrican form (Gambia-Calabar) in having larger spots on the fore-wing (above) and a larger, more oblong than wedge-shaped, patch on the hind-wing. The latter character is also found in a male from the Congo in the Bates Collection.

In the females the fore-wing does not differ from that of the typical West-African form, but the hind-wing discal patch of cream-white, cream, or pale ochreous-yellow is, like that of the male, more oblong in shape. The suffusion beyond the disc to the margin has darker streaks in the interspaces between the veins, as in the AngoleseCongo form, but both from this and from the Gaboon form the Ruwenzori specimens are readily separable by the smaller size of the spots on the fore-wing.

## Harma theobene.

Harma theobene Doubl. Hew. Gen. Diurn. Lep. t. 4.0. f. 3 (1850).
1 of. Fort Beni, Semliki Valley. 21. vii. 06.

Neptis saclava Marpessa.
Neptis marpessa Hopffer, Ber. Verh. Ak. Berlin, 1855, p. 840.
11 of ठ, 1 우. Mokia, S.E. Ruwenzori. 3500 ft. 20. iv. \& 7, 18. v. 06.
1 ㄷ. Mubuku Valley, E. Ruwenzori. 6000-13,000 ft. 23. i. 06.
Neptis agatha.
Papilio agatha Cramer, Pap. Ex. iv. t. 327. ff. A, B (1782).
1 ơ, $^{1}$ ㅇ. Mokia, S.E. Ruwenzori. 3500 ft. 18, 19. v. 06.
$4 \delta^{\circ}$ o . Mubuku Valley, E. Ruwenzori. $5000-13,000 \mathrm{ft} . \quad 17$. i. \& 28. iin. 06.
Ruwenzori. 5600 ft . (G. F. Scott Elliot.)

## Neptidopsis ophione velleda.

Papilio ophione Cramer, Pap. Ex. ii. p. 27, t. 114. ff. E, F (1777).
Eurytela velleda Mabille, Ann. Soe. Ent. Fr. (6) x. p. 19 (1890).
$3 \delta^{\star}$ of, 1 ㅇ. Mubuku Valley, E. Ruwenzori. $5000-13,000 \mathrm{ft}$. 13. ii. \& 16.iii. 06. pol. xix.-Part in. No. 21.-December, 1909.

Eurytela dryope angulata.
Papilio dryope Cramer, Pap. Ex. i. p. 125, t. 78. ff. E, F (1775).
Eurytela dryope var. angulata Aurivillius, Rhop. Eth. p. 154. (1899).
$50^{\star} \mathrm{ob}^{2} 2$ 오 오. Mokia, S.E. Ruwenzori. 3500 ft. 1-22. v. 06.
Ergolis enotrea.
Papilio enotrea Cramer, Pap. Ex. iii. p. 73, t. 236. ff. A, B (1779).
2 ơ ${ }^{\circ}, 2$ 오오. Mokia, S.E. Ruwenzori. 3500 ft 29. iv. \& 17. v. 06.
1 of. Kivata, Ruwenzori. 6000-8000 ft. v. (G. F. Scott Elliot.)
1 ㅇ. Semliki Valley. 10. viii. 06.

Ergolis pagensteckeri. (Plate V. fig. 6, ơ.)
Ergolis pagensteckeri Suffert, Iris, xvii. p. 125 (1904).
$1 \delta^{\circ}$. Entebbe, Uganda. 3.v. 95. (F. J. Jackson.)
1 ơ. Entebbe, Uganda. 11. xii. 95. (F. J. Jackson.)
1 ó. Mulema, Uganda. v.03. (W. G. Doggett.)
1 ㅇ. Mulema, Uganda. v. 03. (W. G. Doggett.)
1 os. Kivata, Ruwenzori. 6000-8000 ft. v. (G. F. Scott Elliot.)
forma $n$. aurantiaca. (Plate V. fig. 5, ó.)
$4 \delta^{\circ} \delta^{\circ}$. Mubuku Valley, E. Ruwenzori. $5000-13,000 \mathrm{ft} .6$. i. \& 17. iii. 06.
1 o. Ruwenzori. (G. F. Scott Elliot.)
2 o $^{\circ}$ ot Toro. 16. vi. 1900. (Sir H. H. Johnston.)
7 This variety differs from the typical form in the following respects:-
Upperside. The ground-colour is paler and more luteous, while the transverse rows of elongate spots and lunules are orange-ochraceous (instead of chestnut), those nearer the base being darker and the external rows considerably paler, especially in the forewing; these markings are outlined, as usual, with olive-brown edgings, which make them stand out very conspicuously on the paler ground-colour. The marginal band is still chestnut ou the fore-wings, but more orange on the hind-wings.

Underside. The chestnut bands are slightly reduced in width and stand out clearly from the light yellow-grey ground.

Transitional forms exist in which the basal bands in the cell of the fore-wing are coloured mesially with redder scales (even in the typical form a few more warmly coloured scales are traceable) and show indications of the narrow discal band which, with its thin orange lunules, is such a conspicuous feature in E. aurantiaca.

Bybla antatara achelola.
Hypanis anvatara Boisd. Fauna Madag. p. 56, t. 7. f. 5 (1833).
Hypanis acheloia Wallengren, Rhop. Caff. p. 29 (1857).
7 ơ ${ }^{\circ}, 4$ 오 오. Mokia, S.E. Ruwenzori. $3500 \mathrm{ft} .25 . \mathrm{iv}$. to 22. v. 06.
1 ö. Mubuku Valley, E. Ruwenzori. $6000-13,000 \mathrm{ft}$. 13. ii. 06.
All the specimens belong to the wet-season form.

## Charaxes eupale dilutus.

Papilio eupale Drury, Ill. Ex. Ins. iii. p. 7, t. 6. f. 3 (1;82).
Charaxes eupalus dilutus Rothschild \& Jordan, Nov. Zool. v. p. 97 (1898).
1 o. Mubuku Valley, E. Ruwenzori. 6000-13,000 ft. 23. i. 06.

## Charates candiope var. viridicostatus.

Nymphalis candiope Godart, Enc. Méth. ix. p. 353 (1823).
Charaxes viridicostatus Aurivillius, Öfvers. Vet.-Ak. Forh. xxxvi. 7, p. 41 (1879).
$2 \delta^{\circ} \delta^{\circ}$ Mubuku Valley, E. Ruwenzori. $6000-13,000 \mathrm{ft} .3,5 . \mathrm{ii} .06$.

## Charaxes fulvescens monit r.

Charaxes fulvescens Aurivillius, Ent. Tidskr. xii. p. 216 (1891).
Charaxes fulvescens monitor Rothschild \& Jordan, Nov. Zool. vii. p. 361 (1900).
$3 \sigma^{*}$ o . Mubuku Valley, E. Ruwenzori. $6000-13.000 \mathrm{ft}$. 16. i. \& 2. iii. 06.
8 ठ ठ̋. Mokia, S.E. Ruwenzori. 3500 ft . 20. v. 06.

Charanes epijasius.
Charaxes epijasius Reiche, in Ferret \& Galin. Voy. Abyss. Ent. p. 469, t. 32. ff. 1, 2 (1849).
forma typica.
1 o. Mokia, S.E. Ruwenzori. 3500 ft . 5. v. 06.
Var.
1 б̄. Mokia, S.E. Ruwenzori. 3500 ft . 26. v. 06.
This is a variety with the pale blue on the hind-wing reduced to a few small spots. It corresponds to C. harrisoni E. M. Sharpe, which is a variety of Charaxes s̈aturnus.

## Charaxes etheocles.

Papilio etheocles Cramer, Pap. Ex. ii. p. 34, t. 119. ff. D, E (1777).
forma KIRKII.
Charaxes kirkii Butler, Ent. Mo. Mag. p. 145 (1881).
3 ot $\begin{gathered}\text {. Mokia, S.E. Ruwenzori } \quad 3500 \mathrm{ft} . \quad 5 . v .06 . ~\end{gathered}$

Charates opinatus, sp. n. (Plate V. fig. 7, of.)
Expanse 78 mm . $0^{7}$.
Above the species has the appearance of a member of the $C$. ethation group, and below resembles some ally of $C$. anticlea, thus apparently forming a link between these two divergent groups.

In wing-shape hardly differing from the same sex of $C$. ethalion, except that the tornus of the fore-wings is a little less acute, while the hind-wings are rather more produced and the tail at vein 4 is a third longer than that at 2 , which latter is about the usual ethalion length, though in that species the proportionate length of the tails is reversed.

Upperside. Head, body, and wings seal-brown, the wing-border narrowly black; cilia white on hind wings and interrupted with black at veins on fore-wing. Forewing uniform seal-brown. Hind-wing with a submarginal band about 1.5 mm . wide, which is of an ochraceous rufous-brown colour, except at the tornus, where are a few gallstone-yellow scales; the submarginal spots, of the usual ethation shape, are greyblue scaled with white centres, the white colour disappearing in the more costalward spots. A narrow ( 1 mm .) post-discal macular band of tawny brown to dull brown from vein 7 to $1 b$, subparallel to the external margin.

Underside. The markings in yellowish and olivaceons greys suggest the brown to light red ones of anticlea $\delta^{\circ}$, but on the fore-wing the discal band is proportionately wider, more expanded costalwards, straighter externally, and more broken internally; the fine sinuate line which bounds externally the next patch of the ground-colour is, from vein 1 to the costal margin, closer to the discal band, which thus exceeds the width of the ground-colour band, except near the costa. On the hind-wings the space outside this sinuate line is olivaceous green, with a faint line of demarcation from the band of purple-grey ground-colour which adjoins it externally; the outer border is gallstone-yellow, becoming more rufous towards the costa. The dark linear mark internally delimitating the lunules of purple and grey scales, and the marginal line of hind wings, black.

The underside of the palpi and breast, and the tarsi of the fore legs, pale Naples yellow. Underside of the thorax and abdomen, and the tibiæ and tarsi of the mid and hind legs, of the same grey shade as the underside of the wings.

Hab. E. Ruwenzori.
3 ơ ठ๋. Mubuku Valley, E. Ruwenzori. $5000-13,000 \mathrm{ft}$. 3. ii. \& 8. iii. 06.

> Family Lemonild.

Abisara geryon.
Abisara geryon Staudinger, Ex. Schmett. p. 239, t. 88 (1887-88).
1 ㅇ. Fort Benî, Semliki Valley. 21. vii. 06.

## Family Lycenide.

Pseuderesia despecta.
Pseuderesia despecta Holland, Psyche, v. p. 426 (1890).
1 ó Fort Beni, Semliki Valley. 21. vii. 06.
Tingra clarensis.
Pentila clarensis Neave, Ent. Mag. xxxix. p. 136 (1903).
7 of ơ, 1 ¢. Mokia, S.E. Ruwenzori. 3500 ft. 29. iv. 06.

## Megalopalpus simplex.

Megalopalpus simplex Räber, Iris, p. 51, t. 4. f. 4, ㅇ (1886).
1 o $^{\text {. }}$ Mubuku Valley, E. Rumenzori. 5000-7000 ft. 13. ii. 06.

## Lachnocnema d'urbani.

Laclnocnema d'urbani Trimen, S. African Butt. ii. p. 236 (1887).
1 ơ, 1 우. Mokia, S.E. Ruwenzori. 3500 ft. 16.iv. \& 18. vi. 06.
Virachola antalus.
Dipsas antalus Hopfer, Ber. Verh. Ak. Berl. 1855, p. 641.
1 f. Mokia, S.E. Ruwenzori. 3500 ft. 16. vi. 06.

## Hypolycema pachalica.

Hypolycana (Tatura) pachalica Butler, P. Z. S. 1888, p. 69.
3 ठั ơ, 6 우 ㅇ. Mokia, S.E. Ruwenzori. 26. iv. \& 4, 17, 25. v. 06.

## Hypolyceena philippus.

Papilio philippus Fabricius, Ent. Syst. iii. 1, p. 283 (1793).
1 ㅇ. Fort Beni, Semliki Valley. 21. vii. 06.

## Hypolycena jacksoni.

Hypolycena jacksoni Bethune-Baker, Ann. \& Mag. N. H. (7) xvii. p. 107 (1906).
2 ơ ơ. Mubuku Valley, S.E. Ruwenzori. $5000-13,000$ ft. $\quad 5$. ii. \& 7. iii. 06.

## Axtocerses harpax.

Papilio harpax Fabricius, Syst. Ent. p. 829 (1775).
1 ot, $^{1}$ ㅇ. Mokia, S.E. Ruwenzori. 3500 ft. 14, 24. v. 00.
Lycenesthes amarah.
Polyommatus amarah Guérin, Lefêb. Voy. Abyss. vi. p. 384, t. 11. ff. 5, 6 (1847).
7 ơ ơ, 3 오 ㅇ. Mokia, S.E. Ruwenzori. 3500 ft. 27, 30. iv. \& 4. v. 06.

## Lycenesthes larydas.

Papilio larydas Cramer, Pap. Ex. iii. p. 160, t. 282. f. H (1780).
1 o $^{\circ}$. Mokia, S.E. Ruwenzori. 3500 ft . 17. v. 06.

## Lycenesthes scintillula.

Lycanesthes scintillula Holland, Psyche, vi. p. 50 (1891).
$1 \delta^{\circ}$. Semliki Valley. 10. viii. 06.

## Lycenesthes crawshayi.

Lycanesthes crawshayi Butler.
1 ơ. Mokia, S.E. Ruwenzori. 3500 ft . 25. iv. 06.

## Lychenesthes lemnos.

Lycenesthes lemnos Hewitson, III. Diurn. Lep. p. 221, t. 90. ff. 13, 14 (1878).
4 ठ ơ, 2 우. Mokia, S.E. Ruwenzori. 3500 ft. 20. iv. \& 4, 7. v. 06.
2 б ${ }^{\circ}$. Mubuku Valley, E. Ruwenzori. $5000-7000 \mathrm{ft}$. 9.ii. 06.

## Lrceenesthes hobleyi.

Lycenesthes hobleyi Neave, Nov. Zool. xi. p. 339 (1904).
2 ơ ơ. Mubuku Valley, E. Ruwenzori, 5000-7000 ft. 3, 8. ii. 06.

## Lycenesthes otacilia.

Lycanesthes otacilia Trimen, Trans. Ent. Soc. 1868, p. 90.
5 ơ ơ, 1 ㅇ. Mokia, S.E. Ruwenzori. 3500 ft. 30.iv. \& 4.v. 06.

## Pillyaria cyara.

Lycena cyara Hewitson, Ex. Butt. v. Lycana, pl. i. ff. 9, 10 (1876).
1 ơ. Mubuku Valley, E. Ruwenzori. $5000-7000 \mathrm{ft}$. 23.iii. 06.
Harpendyreus, gen. n.
Fore-wing: greatest breadth about two-thirds of the length; cell half as long as the wing, the discocellular veins (the lower and middle only being present) nearly in a straight line and almost at right angles to the costa ; vein 12 about as long as the cell ; vein 11, which is well separated from 12, arises at about two-thirds from the base of the cell, and 10 about halfway between that and the end of the cell, where 6 and the stalk of 8 and 9 arise together; 8 finishes before apex, and 9 arises a little nearer apex than cell ; 5 a little nearer 4 than $6 ; 2$ at the same distance from the base as 11 ; and 3 one-third the distance between 2 and 4 .

Hind-wing: greatest breadth nearly three-quarters of the length ; the cell has the upper border slightly arched and in the same line as $6 ; 7$ arises about one-sixth from
the end of the cell ; 5 a little nearer 6 than 4 ; the upper discocellular nearly straight, inclined inwards, the lower slightly convex inwardly; together they are about equal to half the cell-length, which is a little more than half the wing; 3 and 4 arising together at the lower corner of the cell ; and 2 at about two-thirds from the base of the cell.

Antennal club more gradual than in Uranothauma, and about one-sixth of the total antennal length.

The subporrect palpi clothed with projecting hairs, which are about half the length of the second joint; the third joint also hairy.

The fore tarsi with an apical spine in the male and with a claw in the female.
No sex-mark present in the type species.
ibove, the appearance of this species suggests a Scolitantides, while the underside recalls the markings of the Uranothauma group, especially of $U$. antinorii. Following the classification of Aurivillius, it wonld be assigned to Cupido in the section Cacyreus Butler (proposed to replace the preoccupied Hyreus Hübner), on the strength of the underside marking and the freedom of vein 11 of the fore-wing from vein 12 ; but the shape of the hind-wings, with the costa arched in both sexes (instead of being somewhat sigmoid as in the males of Cacyreus), the entire absence of a tail in botn sexes, the very much greater separation of veins 11 and 12 in the fore-wing, and the rather more irregularly cuneiform shape of the hind-wing cell-extending about half the length of the wings, with a slightly inward inclination of the discocellulars costally,-seem points sufficient to give at least subgeneric value; and preferring to treat it as generic, I propose the name Harpendyreus for the form under dxscussion.

Harpendyrels reginaldi, sp. n. (Plate V. figs. 23,24 , of ; 25, 26, 우.)
Greatest wing-expanse : ठ 30 mm ., ㅇ 32 mm . Antennæ 8 mm .
Structure.-Fore-wing: in both sexes the costa is slightly arched; the apex evenly rounded, the costa making more than two-thirds of a right angle with the external margin, which is but slightly convex ; the tornus bluntly rounded and the interior margin nearly straight. Hind-wing: in the male the costa is well arched, the external margin convex, and the internal margin torming a flattened curve, less arched than the costal. The of similar, but the costa a little less arched; at vein 1 a slight noncaudate projection, the tornus evenly rounded, and the internal margin slightly sinuate distally.
©. -Upperside. Fore-wing: dull blue (much discoloured, probably with a violet gloss), the costal margin with a narrow edging of dark brown, the externai margin with a broad well-defined border of dark brown ( 2 mm . wide), the cilia white with brown patches at the veins. Hind-wing: with the outer brown border much broader than in the fore-wing, ill-defined internally and partly suffused with lighter cinnamon scaling; between veins 1 and 2 is a black ocellus, which is scaled with blue-white externally and bounded inwardly by a partial ring of almost tawny scales.

Undersine. Cream-white, with sepia-brown markings. Fore-wing: a russet-brown powdering of scales partially obscures all but the outer third of the wing, and the basal markings appear indistinctly as merely a darker shade of the same russet-colour ; in the cell a bar about 1 mm . wide, with lighter borders, with its dorsal corner at the origin of vein 2 ; at the end of the cell a similar bar, traversed by the discocellulars, and having lighter inner and outer edges. Above each of these, at the costal border, a small dark spot, the outer really a very much inwardly displaced member of the discal band; beyond these, one-third from the external margin and parallel with it, a transverse curved row of roughly-reniform spots between the veins; owing to the limits of the interspaces the spots are longest antero-posteriorly towards the internal margin, and the lowest one is rather oblique. About 1.5 mm . from the external margin a row of six lunulate spots, the lowest much displaced inwardly; between these spots and the margin, with their convex side fitting into the concavity of those of the inner row, are six elongate subsemicircular markings. The border is narrowly outlined with dark sepia. Hind-wing: the two external rows of spots are similar to those in the fore-wing, save that the outer spot in interspace 1 is replaced by a black ocellus pupilled with silvery-blue scales; but the transverse band of subreniform spots from the costal to the inner margin almost forms a zigzag, the fourth spot from the costa being the most distal. The basal spots show the general arrangement common in Uranothauma; a spot at the end of the cell, and, basal to this, three irregular rows of spots, some with internal pale scaling, the costal spot of the outer row being much larger than the others and reniform in shape.

오.-Upperside. The poor condition of the specimen makes the true coloration of the female rather a matter of conjecture; the cilia are a good deal damaged, but appear to be uniformly brown. Fore-wing: violet scales can be traced on the basal half and behind the middle of the cell; the external dark border is a little broader than that of the male and less sharply defined; while there is an additional dark transverse band (representing the discal row of spots beneath), separated from the border by an indistinct narrow paler band. Hind-wing: no violet scales can be traced with certainty on the darkened basal area; the indistinct pale submarginal band of the fore-wing is continued from the costa to vein 2 ; and the black ocellus lacks the inner edging of tawny scales.

Uxderside. The markings generally similar to those of the male, but the groundcolour distinctly more grey. Fore-wing: the discal row of spots is more consolidated than in the male, being also straighter near the costa and with the lorvest spot not oblique.

The thorax and abdomen dull blue, with a few browner scales above; below lighter, more grey.

Fiab. E. Ruwenzori.
1 ơ, 1 오. Mubuku Valley, E. Ruwenzori. $6000-13,000 \mathrm{ft} . \quad 7,14$. ii. 06.

## Uranothauma nubifer.

Lycæna nubifer Trimen, Trans. Ent. Soe. 1895, p. 187, pl. v. ff. 4. $4 a$.
1 ơ. Mubuku Valley, E. Ruwenzori. $6000-13,000 \mathrm{ft}$. 28. i. 06.

Hyreus falkensteinii Butler (nee Dewitz), P. Z. S. 1895, p. 733.
Wing-expanse: o $32-35 \mathrm{~mm}$., \& $30-32 \mathrm{~mm}$.
Very closely allied to $U$. falkensteinii Dewitz.
Structure.-Fore-wing with the costa very slightly curved, the internal margin straight and about four-fifths of the length of the costa, the external margin slightly convex outwardly. In some specimens veins 12 and 11 nearly touch one another, in others they anastomose; in the male vein 6 arises from 7 beyond the end of the cell, thus shortening the sex-streak in space 6 , while in the female 6 arises at the end of the cell. Hind-wing about equal in length to the internal margin of the fore-wing, the costal margin slightly sigmoid, the external margin convex, and the anal angle distinctly produced; the general shape being the same as in $U$. cordatus E. M. Sharpe; the tail on vein 2 is much longer and thicker than that of $U$. falkensteinii.
o. -Upperside. Dark cinnamon-brown, darker towards the external margin and with a general purple gloss. Fore-wing with the sex-streaks appearing as internervular blackish lines, the cilia broadly chequered with dark brown and white. Hind-wing with the costal and internal borders sepia-brown and lacking the purple gloss, and there are usually a few metallic blue-green scales at the anal angle, and again just above the tail ; cilia dirty white, narrowly interrupted with brown on the veins.

Underside. Fore-wing: ground-colour varied from light sienna-brown at base to a cloudy light sepia-brown distally, being greyish white in the median area. The markings are sepia-brown edged with creamy white: at base of the discoidal cell a small dark triangular patch; beyond this a bar at the origin of vein 2 , reaching to the costa, and another on the discocellular veins; a post-median band starts from the costa, where it is very broad, and continues towards the tornus as far as vein 2 , becoming gradually narrower and less distinct; the lateral edges of this band are more or less sinuate, and its costal edge is interrupted by a small white spot; between this band and the discocellular bar there is a small dark spot on the costa; midway between the discocellular and post-median bands lies an oblong transverse spot in space 2 , with a similar one adjoining it in space 1 , this latter being sometimes absent. In $U$. nubifer the spot in space 2 is always more or less attached to the post-median band, in U. delatorum never. Hind-wing: ground-colour lustrous creamy white. The markings are of the darkest shade of sepia-brown and comprise a roughly triangular basal marking extending halfway along the inner margin, the apex being a little beyond the origin of vein 2, where it touches the discal band, which extends from the vol. xix.--part in. No. 22.-December, 1909.
costa to the internal margin. The spots in spaces 7 and 6 form roughly a biconcave vertical bar; that in space 5 is much longer than the one in 6 and extends nearer the outer margin, but its inner half is broadly interrupted by a large white spot; the spot in space 4 is much the longest of the series, its base being on the discocellular and its point extending much beyond that in space 5 , its posterior side being almost twice the length of its costal; that in space 3 is a mere triangle reaching distally to the level of the spot in space 5 ; in space 2 is again another triangular spot extending externally to the level of that in 6 ; in space $1 b$ an oblong spot, a little outwardly displaced, its outside edge on a level with that in space 3 ; about one-third from the base of the costa is a small triangular patch, having its base on the costa and its apex about the middle of space 7. There is a thin marginal line, and on either side of the base of the tail is a large black spot scaled with metallic green outwardly. Beyond the discal band there extends, from the costa to the inner margin, a broken sepia shade, reaching its maximum width of about a quarter of the wing-breadth in spaces 2 and 3 (where, in some cases, it even extends inwards to the discal band), thence becoming much narrower and more faint towards the costa.

ㅇ.-Upperside. Much paler than in the of and with a much more restricted pinkish-violet gloss. Fore-wing blackish at the base, with a broad ill-defined dark brown border on the external margin and the following dark brown markings : a large subquadrate spot at the end of the cell; a broad curved subapical band, broadest on the costa and gradually narrowing to a point on vein 3 ; midway between and behind these markings is an elongate transverse patch between veins 3 and 1. Hind-wing with the pinkish gloss less evident ; the metallic spots near the tail more distinct than in the male.

Underside. As in the male.
The antennæ blunt with fine white rings at the joints and creamy scales at the base of the underside of the club. Head with palpi, thorax, abdomen, and legs black above, dull cream below, except the third joint of the palpi, which is black.

Hab. E. and S.E. Ruwenzori.
1 o. Mokia, S.E. Ruwenzori. 3500 ft . 20.v. 06.
20 ơ $^{*}, 2$ ¢ $\ddagger$. . Mubuku Valley, E. Ruwenzori. $5000-13,000 \mathrm{ft}$. 16, 23, 28. i. \& 5. ii. 06 .

Ruwenzori. 5600 ft . (G. F. Scott Elliot.)
At first sight the warm-flushed coppery colour of the upperside and the internervular and intracellular distribution of the sex-streaks of the male give a deceptive resemblance to the same sex of $U$. falkensteinii Dewitz (Plate V. figs. 19, ơ ; 20, ㅇ), and the colouring of the under surface is similar in both. But the wing-shape is that of $U$. nubifer, and differs from that of $U$. falkensteinii in that the fore-wing is more acute at the apex, the outer margin being straighter and the inner margin longer, while the hind-wing has a slightly sigmoid costa and is more produced at the anal angle, and
the tail is broader and double the length of that of U. falkensteinii. The solitary female of $U$. falkensteinii in the Museum is from Lagos, and suggests a very white form of the genus $A z a n u s$, while the female of $U$. delatorum presents merely a paler tint of the colouring of its male.

In the typical section of the genus Uranothauma the male sex-mark is a discal subtriangular mass of raised black scales extending from vein 7 nearly to vein 2 of the fore-wing, as in U. crawshayi, U. cordatus, and U. nubifer. There is no sex-mark at all in U. antinorii; while in U. poggei, pelotus, artemenes, fulkensteinï, and delatorum the sex-mark consists of internervular and intracellular streaks from vein 7 to vein 1 , except that in $U$. poggei there are no streaks in the cell. In $U$. delatorum these linear raised streaks of black scales, which are thicker basally, occur in the spaces 6-1; one to each space, except in 1 , in which there are two streaks, extending almost from the margin to the base, and indicating the probability that this cell has been produced by the fusion of two cells. The streaks in 4 and 5 are continued across the discocellulars almost to the base of the discoidal cell.

## Cacyreus palemon.

Papilio palemon Cramer, Pap. Ex. iv. p. 209, t. 390. ff. E, F (1782).
16 ơ ơ, 2 우. ㅇ. Mubuku Valley, E. Ruwenzori. $5000-7000 \mathrm{ft}$. 25. xii. 05 ; 14, i., 5. ii., \& 7. iii. 06.

Kasamaza's, Ruvenzori. 5300 ft . 13-23. iv. (G. F. Scott Elliot.)
Cactreus lingrus.
Papilio lingeus Cramer, Pap. Ex. iv. p. 176, t. 379. ff. F, G (1781).
1 ơ. Semliki Valley. 10. vii. 06.
1 ठ. Mokia, S.E. Ruwenzori. 3500 ft. 29. iv. \& 4. v. 06.
2 o o $^{\circ}, 1$ ¢. Mubuku Valley, E. Ruwenzori. $5000-7000 \mathrm{ft} . ~ 9, ~ 17$. i. 06.

## Castalius margaritaceus.

Castalius margaritaceus E. M. Sharpe, P. Z. S. 1891, p. 636, t. 48. f. 3

Ruwenzori. 5000-6000 ft. (G. F. Scott Elliot.)

## Castalius isis.

Papilio isis Drury, Ill. Exot. Ins. ii. p. 6. t. 3. ff. 4, 5 (1773).
$2 \delta^{\circ} \delta^{\circ}$. Fort Beni, Semliki Valley. 21. vii. 06.
Semliki Valley. 10. viii. 06.

Syatarucus telicanus forma plinius.
Papilio telicanus Lang. Verz. p. 47 (1789).
Papilio plinius Fabricius, Ent. Syst. 3, i. p. 284 (1793).
2 ठ ठ $\quad$. Mokia, S.E. Ruwenzori. 3500 ft. 25. v. 06.
4 of $0^{*}, 2$ 오 ㅇ. Mubuku Valley, E. Ruwenzori. $5000-7000 \mathrm{ft}$. 25. xii. 05 ;
2. i. \& 16. iii. 06 .

## Cyclyrius equatorialis.

Lycena equatorialis E. M. Sharpe, P. Z. S. 1891, p. 637, pl. xiviii. f. 5.
31 ơ ơ. Mubuku Valley, E. Ruwenzori. $5000-7000 \mathrm{ft}$ 30. xii. 05 ; 8. ii. \& 1. 17. iii. 06.

Ruwenzori, 6000-9000 ft. (G. F. Scott Elliot.)

## Polyonmatus beticus.

Papilio beticus Linn. Syst. Nat. ed. 12, p. 789 (1767).
9 ơ ơ, $^{3}$ 오 ㅇ. Mubuku Valley, E. Ruwenzori. $5000-7000 \mathrm{ft}$. 4. i., 5. ii., \& 16. iii. 06.

Ruwenzori. 5600 ft (G. F. Scott Elliot.)
Catochrysops malathana.
Lycena malathana Boisduval, Fauna Madag. p. 25 (1833).
1 ठ. Mokia, S.E. Ruwenzori. 3500 ft. 5. v. 06.

## Azanus natalensis.

Lycæna natalensis Trimen, S. Afr. Butt. ii. p. 77 (1887).
21 ơ $\boldsymbol{\sigma}^{2}, 3$ 호 ㅎ. Mokia, S.E. Ruwenzori. 3500 ft. 17, 28, 29. iv. \& 1. v. 06.
Zizera gaika.
Lycena gaika Trimen, Trans. Ent. Soc. ser. 3, i. p. 403 (1862).
11 ơ ơ, 2 오 ㅇ.. Mokia, S.E. Ruwenzori. 3500 ft 24. v. 06.

## Zizera knysna.

Lycena knysna Trimen, Trans. Ent. Soc. ser. 3, vol. i. p. 282 (1862).
$2 \sigma^{\circ} \delta^{\circ}$. Mokia, S.E. Ruwenzori. 3500 ft. 4, 18. v. 06.
Kasamaza's, Ruwenzori. 5300 ft. April. (G. F. Scott Elliot.)
Cupidopsis jobates.
Lycrena jobates Hopffer, Monatsb. Akad. Wiss. Berl. 1855, p. 642 (1855).
1 ơ, 2 우 ㅇ. Mokia, S.E. Ruwenzori. 3500 ft. 24. v. \& 16. vi. 06.

Catochrysops osiris.
Lycena osiris Hopffer, Ber. Akad. Wiss. Berl. 1855, p. 642.
1 ㅇ. Mokia, S.E. Ruwenzori. 3500 ft. 7. v. 06.

## Catochrysops celeus.

Papilio celeus Cramer, Pap. Ex. iv. p. 177, t. 379. ff. K, K (1788).
2 ơ $^{\circ}$ ơ Mokia, S.E. Ruwenzori. 3500 ft. 5. v. 06.

## Family Pieridet.

Leptosia medusa.
Papilio medusa Cramer, Pap. Ex. ii. p. 86, t. 150. f. F (1777).

> forma ALCESTA.

Papilio alcesta Cramer, Pap. Ex. iv. p. 175, t. 379. f. A (1781).
14 ơ ठ̛. Mokia, S.E. Ruwenzori. 3500 ft. 2, 21, 28. v. 06. forma immaculata.
Nychitona medusa var. immaculata Aurivillius, Ent. Tijdskr. xvi. p. 257 (1895).
11 ơ ơ. Mubuku Valley, E. Ruwenzori. $5000-7000 \mathrm{ft}$. 16, 17. iii. 06.
1 ठt. Mokia, S.E. Ruwenzori. 3500 ft. 9. v. 06.

## forma nupta.

Nychitona nupta Butler, Cist. Ent. i. p. 175 (1873).
Kasamaza's, Ruwenzori. 5300 ft . 13-23. iv. (G. F. Scott Elliot.)
Kivata, Ruwenzori. 6000-8000 ft. v. (G. F. Scott Elliot.)
Mylothris clarissa.
Mylothris clarissa Butler, P. Z. S. 1888, p. 70.
1 ㅇ. Mubuku Valley, E. Ruwenzori. $6000-13,000$ ft. 26. i. 06.

## Milothris croceus.

Mylothris croceus Butler, P. Z. S. 1895, p. 734, pl. xliii. f. 1.
6 ơ ठ゙, 2 ㅇ ㅇ. E. Ruwenzori. $6000-13,000$ ft. 6. ii. 06 . $5000-7000 \mathrm{ft} .3,16$, 23. iii. 06.

Between Kivata and Luimi, Ruwenzori. $5000-8000 \mathrm{ft}$. v. \& vi. ( $G$. $F$. Scott Elliot.)

## Mylothris agathiva.

Papilio agathina Cramer, Pap. Ex. iii. p. 76, t. 237. ff. D, E (1779).
1 ơ. Mubuku Valley, E. Ruwenzori. $5000-7000$ ft. 23. iii. 06.

Mylothris rubricosta.
Pieris rubricosta Mabille, Ann. Soc. Ent. Fr. (6) x. p. 28 (1890).
1 f. Mubuku Valley, E. Ruwenzori. 6000-13,000 ft. 26. i. 06.
Mylothris jacksoni.
Mylothris jacksoni E. M. Sharpe, P. Z. S. 1891, p. 190, t. 16. f. 3.
3 ơ $\begin{gathered}\text {. Mubuku Valley, E. Ruwenzori, } 6000-13,000 \mathrm{ft} . \\ 15 . \\ \text { i. \& 7. ii. } 06 .\end{gathered}$
'Terias desjardinsil.
Xanthidia desjardinsii Boisduval, Faune Ent. Madag. p. 22, t. 2. f. 6 (1833).
of f. Kivata, Ruwenzori. 6000-8000 ft. v. (G. F. Scott Elliot.)
Terias marshalli.
forma punctinotata Butler.
Terias punctinotata Butler, P. Z. S. 1895, p. 633, pl. xxxv. ff. 8 \& 9.
13 of ơ, 2 오 우. Mubuku Valley, E. Rawenzori. $5000-13,000 \mathrm{ft}$. 2, 17. i. \& 8. ii. 06 .
forma Marsinalli.
Terias marshalli Butler, Ann. \& Mag. N. H. (7) i. p. 62 (1898).
1 of. Kivata, Ruwenzori. $6000-8000$ ft. v. (G. F. Scott Elliot.)
This specimeu is of the dry-season form.

## Terias regularis.

Terias regularis Butler, Ann. \& Mag. N. H. (4) xviii. p. 486 (1876).
3 ठ̊ ơ. Mokia, S.E. Ruwenzori. $3500 \mathrm{ft} .29,30$. iv. 06 . (Wet-season form.)
1 q. Kivata, Ruwenzori. 6000-8000 ft. v. (G. F. Scott Elliot.)

Terias brigitta.
Papilio brigitta Cramer, Pap. Ex. iv. p. 82, t. 331. ff. B, C.
Terias zoë Hopffer, Monatsb. Ak. Wiss. Berl. 1855, p. 640.
1 ㅇ. Mokia, S.E. Ruwenzori. 3500 ft. 29. iv. 06.
1 ㅇ. Kivata, Ruwenzori. $5300-8000 \mathrm{ft} . \quad$ v. (G. F. Scott Elliot.)

Terias brenda.
Tierias brenda Doubleday, Gen. Diurn. Lep. pl. 9. f. 6 (1847).
2 ơ ơ. Mokia, S.E. Ruwenzori. 3500 ft. 20. v. 06.
1 ㅇ Semliki Forest. 10. viii. 06.

Terias boisduvaliafa.
Terias boisduvaliana Mabille, Hist. Mad., Lép. i. p. 253, t. 32. ff. 4, 5 (1885-87).
2 ơ ơ. Mokia, S.E. Ruwenzori. 3500 ft. 2, 7. v. 06.
Terias boisduvaliana var. $n$. reducta.
2 ㅇㅇ. Mubuku Valley, E. Ruwenzori. $5000-7000$ ft. 1. iii. 06.
A lemon-coloured form with the black border of the fore-wing only reaching vein 2.

## Catopsilia florella.

Papilio florella Fabricius, Syst. Ent. p. 479 (1775).
5 ơ $^{\text {ot, }} 4$ 오 ㅇ. . Mubuku Valley, E. Ruwenzori. $6000-13,000 \mathrm{ft}$. 28. i., 6. ii., \& 17. iii. 06.

## forma pyrene.

Colias pyrene Swainson, Zool. Ill. i. t. 51 (1820-1821).
1 ㅇ. Mubuku Valley, E. Ruwenzori. 6000-13,000 ft. 20. i. 06.
Teracolus atrigineus.
Teracolus aurigineus Butler, Ann. \& Mag. N. H. (5) xii. p. 103 (1883).
10 ठ ơ, $^{2}$ 오 ㅇ. Mokia, S.E. Ruwenzori. 3500 ft . 16, 27. iv. 06. (Wet-season form.)

## Teracolus puniceus.

Teracolus puniceus Butler, P. Z. S. 1888, p. 72.
8 ठ $\boldsymbol{o}^{2}, 2$ 우 우. Mokia, S.E. Ruwenzori. 3500 ft. 2, 2, 19, 24. v. 06.

## Teracolus pallene pseudetrida.

Callosune pseudetrida Westwood; Oates, Matabele Land, p. 340 (1881).
2 오. Mokia, S.E. Ruwenzori. 3500 ft. 27, 28. iv. 06.
Both examples are of the wet-season form.

## Teracolus antevippe.

Anthocharis antevippe Boisduval, Spéc. Gén. Lép. i. p. 572, t. 18. f. 3 (1836).
Teracolus subvenosus Butler, Ann. \& Mag. N. H. (a) xii. p. 105 (1883).
S $\boldsymbol{\sigma}^{\boldsymbol{z}}, 4$ 우 우. Mokia, S.E. Ruwenzori. 3500 ft . 27, 28. iv. \& 1, 18. צ. 06.

## Teracolus ocale.

Anthocharis ocale Boisduval, Spéc. Gén. Lép. i. p. 584 (1835).
1 of, 3 오. Mokia, S.E. Ruwenzori. 3500 ft. 17. iv. \& 17, 21. v. 06.

Teracolus xanthus.
Teracolus xanthus Swinhoe, P. Z. S. 1884, p. 440, pl. 39. f. 10 (1884).
18 ơ $^{\circ}$. Mokia, S.E. Ruwenzori. 3500 ft .

## Belenois raffray.

Pieris raffrayi Oberthür, Ét. d'Ent. iii. p. 17, pl. 1. f. 3 (1878).
$2 \delta^{\circ} \delta^{\circ}$. Mubuku Valley, E. Ruwenzori. 6000-13,000 ft. 24. ii. \& 1. iii. 06.

## Belenois thysa.

Pieris thysa Hopffer, Monatsb. Ak. Wiss. Berl. 1855, p. 639.


## Belenois severina.

Papilio severina Cramer, Pap. Ex. iv. t. 338. ff. G, H (1782).
7 ơ ô, 7 오. ㅇ. Mokia, S.E. Ruwenzori. $3500 \mathrm{ft} . \quad 16,28$. iv. \& 8, 19, 24. v. 06.
$1 \delta^{\circ}$. Mubuku Valley, Ruwenzori. 6000-13,000 ft. 20. i. 06.
All belong to the wet-season form.
rar. infida Butler.
Belenois infida Butler, P. Z. S. 1888, p. 78.
 (G. F. Scott Elliot.)

## Pelenois westwoodi.

Pinacopteryx westuoodi Wallengren, Lep. Rhop. Caffr. p. 9 (1853).
9 ơ $^{\circ}$, 5 우 우. Mokia, S.E. Ruwenzori. 3500 ft . 16, 17, 25, 29, 30. iv. \& 2, 5. v. 06. (Representative of the wet-season form.)

The females show considerable variation. One has the coloration of the male; the nthers, with ground colours from lemon to orpiment-yellow, are obscured by heavy black borders, usually occupying nearly half the wings, and in one the black scaling extends lightly all over the fore-wing, and eveu in the hind-wings only a portion of the cell is free from the black dusting.

## Belenois soliluuis.

Belenois solilucis Butler, Trans. Ent. Soe. 1874, p. 433.
1 of, 1 q. Mokia, S.E. Ruwenzori. 3500 ft. 9, 24. v. 06.
Belenois zochalifa var. n. ochracea.
1 ㅇ. Mubuku Valley, E. Ruwenzori. 6000-13,000 ft. 23. i. (06. Dry-season form. A rariety with both the fore- and hind-wings ochraceous above.

Glutophrissa contracta.
Glutophrissa contracta Butler, P.Z. S. 1888, p. 75.
3 ơ ơ, 1 우. Mokia, S.E. Ruwenzori. 3500 ft. 3, 24. v. 06.
Leuceronia buquetii.
Callidryas buquetii Boisduval, Spéc. Gén. Lép. i. p. 607 (1836).
2 ơ ơ, 1 우. Mokia, S.E. Ruwenzori. 3500 ft . 16, 25. v. 06.
Nepheronia argia.
Papilio argia Fabricius, Ent. Syst. p. 470 (1775).
forma Typica Aurivillius.
1 아. Fort Beni, Semliki Valley. 25. vii. 06.
Eronia leda.
Eronia leda Boisduval, in Doubl. Gen. D. L. p. 65 (1847).
13 of ơ, 2 우 ㅇ. Mokia, S.E. Ruwenzori. $3500 \mathrm{ft} . \quad 20$. iv. \& 18, 19. v. 06.
Eronia dilatata.
Eronia dilatata Butler, P. Z. S. 1888, p. 96.
3 ठt ${ }^{*}, 1$ 오. Mokia, S.E. Ruwenzori. $3500 \mathrm{ft} .20,30 . \mathrm{iv} . \& 21,22$. v. 06.

Family Papilionide.
Papilio menestheus lormieri.
Papilio lormieri Distant, Ent. Mo. Mag. xi. p. 129 (1874).
I ธ̛. 130 miles W. of Entebbe. 4000 ft . 8. xii. 05.
Papilio phorcas.
Papilio phorcas Cramer, Pap. Ex. i. p. 4, t. 2. ff. B, C (1775).
3 ธ̛ ơ, 1 ㅇ. Mokia, S.E. Ruwenzori. 3500 ft. 19-21. v. 06.

## Papilio mackinnoni.

Papilio mackinnoni E. M. Sharpe, P. Z. S. 1891, p. 187, t. 16. f. 1.
2 б ठ . Mubuku Valley, E. Ruwenzori. $5000-7000 \mathrm{ft}$. 27. iii. 06.
1 ©゙. Between Kivata and Luimi, Ruwenzori. $7000-8000 \mathrm{ft}$. v. or vi. (G. W. Scott Elliot.)

Papilio demodocus.
Papilio demodocus Esper, Ausl. Schmett. p. 205, t. 51. f. 1 (1798).

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Papllio dardanus.
Papilio dardanus Brown, Ill. Zool. p. 52, t. 22 (1776).
14 ơ ơ. Mokia, S.E. Ruwenzori. 3500 ft . 16. v. $06 .^{2}$ forma Hippocoon.
Papilio hippocoon Fabr. Ent. Syst. 3, i. p. 38 (1793).
2 우 우. Mokia, S.E. Ruwenzori. 3500 ft . 16, 21. v. 06.

## Parilio zenobia.

Papilio zenobia Fabricius, Syst. Ent. p. 503 (1775).
1 ठु. Fort Beni, Semliki Valley. 21. vii. 08.
Papilio gallienus.
Papilio cypraafla var. gallienus Distant, P. Z. S. 1879, p. 649.
Papilio mechowi Dewitz, Berl. ent. Zeit. p. 69, t. iii. f. 1 (1882).
$1 \delta^{\circ}$. Fort Beni, Semliki Valley. 21. iv. 06.

## Papllio plagiatus.

Papilio plagiatus Aurivillius, Ent. Tidskr. xix. p. 183 (1898).
9 ơ ${ }^{\circ}$. Mokia, S.E. Ruwenzori. 3500 ft. 14-21. v. 06.

## Papllio jacksoni.

Papilio jacksoni E. M. Sharpe, P. Z. S. 1891, p. 188, t. 17. ff. 1, 2.
2 \% ठ . Mubuku Valley, E. Ruwenzori. $5000-13,000$ ft. 5. ii. \& 7. iii. 06.
1 ㅇ. Ruwenzori. 9000 ft . (G. F. Scott Elliot.)

## Family Hesperifde.

Sarangesa subalbicans.
Sarangesa subalbicans Bethune-Baker, Ann. Mag. N. H. (7) xviii. p. 342 (1306).
3 s $\delta^{\circ}$. Mokia, S.E. Ruwenzori. 3500 ft. 16, 17. vi. 06.
Sarangesa haplopa.
Sarangesa haplopa Swinhoe, Ann. Mag. N. H. (7) xx. p. 431 (1907).
1 उ. Mubuku Valley, E. Ruwenzori. 5000-7000 ft. 17. iii. 06.
Eretis perpaupera.
Eretis perpaupera Holland, Ann. Mag. N. H. p. 288 (1892).
2 ơ t. Mubuku Valley, E. Ruwenzori. $5000-7000$ ft. 23. iii. 06.

## Celemorrhinus proxinus.

Plesioneura proxima Mabille, Bull. Soc. Zool, p. 231 (1877).
$4 \delta^{\circ}$ o. Mokia, S.E. Ruwenzori. $3500 \mathrm{ft} .17,28$. vi. 06.

## Celanorrhinus galenus.

Hesperia galenus Fabricius, Ent. Syst. 3, i. p. 350 (1793).
1 ठ. Mokia, S.E. Ruwenzori. 3500 ft. 16. vi. 06.

## Hesperia ploetzi.

Hesperia ploctzi Aurivillius, Ent. Tidskr. xii. p. 227.
Hesperia spio Plötz (nec Linn.), Mitt. naturw. Ver. Neu-Vorpomn. und Rügen, 1881, p. 2.
$2 \sigma^{\circ} \delta^{*} 1$ ㅇ. Mubuku Valley, E. Ruwenzori. $5000-7000$ ft. 14. i. \& 24. ii. 06.
An Fastern (Uganda) form with very large cream spors.

## Pirgus dromes.

Pyrgus dromus Plötz, Mitt. naturw. Ver. Neu-Vorpomm. und Rügen, 1884, p. 6.
Kivata, Ruwenzori. 6000-8000 ft. May. (G. F. Scott Elliot.)
[The specimen is worn and maimed ; perhaps referable rather to ploetzi.]
Oxypalpus wollastoni, sp. n. (Plate V. fig. 12, o .)
Expanse 25-29 mm.
Above rich fulvous with markings similar to those of $O$. ruso Mabille, but the anderside, as in $O$. fulvus Lathy, shows no sign of radiating streaks on the plain fulvous ground. Its nearest allies are probably O. fulvus Lathy and O. (Pardaleodes) rutilans Mabille.

Upperside. Rich fulvous, with black markings ; the cilia uniformly fulvous. Forewing with a black border along the costal margin, starting very narrowly at about onefifth from the base and gradually widening to the apical angle; a broad black border along the external margin, which is thickly dusted with fulvous scaling and ill-defined internally; from the base almost to the external border extends a broad black longitudinal streak, almost filling the cell, at the end of which its posterior margin is more or less deeply indented-in some specimens quite cut through-by the groundcolour; a similar but narrower streak runs from the base to the border along the posterior edge of vein 2 , but it is broadly interrupted by the ground-colour near the origin of that vein; all the veins are more or less dusted with black scales, and especially vein 1. Hind-wing: completely encircled by a strong black border about 1 mm . wide, except at the costal margin, where it is swollen to double that width, broken only at vein $1 b$, where it is sharply interrupted by a longitudinal streak of the ground-colour, about 5 mm . wide; a narrow black line runs from the base to the outer
border along vein $l b$, and there is a similar streak, but of three times the width, along vein $1 c$; a triangular patch of powdered black, with its apex at the origin of vein 2 , extends outwards one-third the length of the wing.

Underside. Both wings plain fulvous, save for the thin black marginal line from midcosta to the tornus of the fore-wing and from vein 7 to $1 b$ of the hind-wing ; a patch of black scales at the base of the internal margin of the fore-wing extends indistinctly outwards along vein 1 .

Antennæ and palpi black above, fulvous below. Head and body fulvous above, orange below. The legs orange, save that the femora are black above.

3 ơ ơ, from Mokia, S.E. Ruwenzori. 3500 ft. 19, 21. v. \& 27. vi. 06.
Pardaleodes incerta.
Pamphila incerta Suellen, Tijd. Ent. (2) vii. p. 29, t. 2. ff. 10-12 (1872).
1 o. Mubuku Valley, E. Ruwenzori. $6000-13,000$ ft. 9. i. 06.

## Cyclopides metis.

Papilio metis Linn. Muns. Ulr. p. 325 (1764).
3 ơ. Mubuku Valley, E. Ruwenzori. 5000-7000 ft. 6, 7. i. \& 5. ii. 06.
Cyclopides willemi.
Heteropterus willemi Wallengren, Lep. Rhop. Caffr. p. 47 (1857).
1 \&. Mokia, S.E. Ruwenzori. 3500 ft. 27. vi. 06.
Cyclopides midas.
Cyclopides midas Butler, P. Z. S. 1893, p. 671.
2 б ठ , 1 ㅇ. Mubuku Valley, E. Ruwenzori. $5000-7000 \mathrm{ft}$. 17. i. 06.
$2 \delta^{\circ} \sigma^{\circ}$. Kasamaza's 5300 ft ., Kivata 6000-8000 ft., Ruwenzori. (G. F. Scott Elliot.)
Chioneigia, gen. n.
Antennæ a little longer than three-fourths the length of the fore-wing, rather stout, the gradually incrassate club about one-third the length of the shaft and about three times its diameter; the apiculus not sharply marked off from the club-mass and in length hardly more than half its diameter.

Palpi porrect, the third joint hardly visible in the thick mass of scales which obscures the second.

Fore-wing : the costa slightly concave above the distal portion of the cell, and the apex subacute, hardly more than half a right angle in male, more in the female, in which sex the costal margin is proportionately shorter. The convex external margin a little longer than the internal in the male, subequal in the female. The cell less than two-thirds of the wing-length (about five-eighths in male, three-fifths in female);
vein 12 finishing at or beyond cell-end, 8 before wing-apex, and 7 well on external margin in a line with upper border of cell ; 6 just below cell-apex, leaving a minute upper discocellular ; 5 (much bent down at its origin) arises three times as far from 6 as from 4, thus leaving a long middle discocellular generally subparallel with external margin of wing and flexed a little inwards posteriorly; 2 a little nearer to base than to 3 , which is four times as far from 2 as from 4.

Hind-wing: in the male subcircular, its greatest width about equal to the external margin of the fore-wing ; in the female subpyriform. The costa is more arched in the male ; external margin rounded in both sexes and the interual margin almost straight. The cell about half of the wing-length; discocellulars strongly oblique inwards costally ; vein 8 finishing two-thirds along costa; 7 and 6 arising at upper end of cell; 5 hardly developed, at its origin very slightly nearer 6 than 4; 3 arising a little before the end of the cell and twice as far from 4 as it is from 2; the distance between 4 and the base is more than twice the distance between 4 and 3 .

Hind tibiæ with a pair of spurs.
In the male a hardly distinguishable sex-patch of scales covers the area of veins ${ }^{2}$, 3 , and 4 of the hind-wing. The extent and position of this patch are best seen in specimens which have been almost cleared of their scaling by Eau de Javelle.

Type, Chioneigia leggei mihi.
The genus is nearest to Ploetzia and Kedestes.
1t has no fore-wing sex-streak in the male as in the former genus and has a much more minute third joint to the palpus than in the latter genus.

Chioneigia legaei, sp. n. (Plate V. figs. 15,16 , o; 17,18 , ㅇ..)
Expanse: of 38 mm ., of 41 mm .
उ.-Upperside. Fore-wing seal-brown; at the end of the cell two amber spots placed closely one above the other; below these, and almost in a line with them, in space 2 an elongate oblong amber spot, reaching vein 2 ; a minnte spot at the basal angle of space 3 ; midway between the end of the cell and the apex a short band, composed ot three oblong translucent spots, in spaces 6,7 , and 8 , that in 6 being the largest, while the one in 8 is a little longer than the one in 7 ; about halfway between the base and the external margin, and just above vein 1, there is a small spot (sometimes evanescent) of clay-colour or ochre-yellow; cilia light brown. Hind-wing uniform seal-brown; cilia pale ochre.

Underside. Fore-wing: the spots of the upperside appear on a ground varying from seal-brown with ochreous scales at the costa to a full sepia at vein 1, between which and the internal margin the scales are lustrous yellow-grey. The ground-colour is invaded along the external margin from the apex to vein 2 by violaceous brown, which leaves minute internervular triangular patches of ground-colour along the margin. Hindwing light violaceous brown, the costal margin with a broad border of rich brown-pink;
from the apex of this border a transverse band of the same colour runs across the ring, beyond the end of the cell, as far as vein $1 b$; between this and the outer margin is some faint darker shading, and along the margin some vague lunules of greyish scales are sometimes visible.

ㅇ.-Upperside. Paler than that of the male. Fore-wing with the elongate spot in space 2 more displaced outwardly, the spot in space 3 larger; while in the subapical band the spot in space $S$ is not longer than that in 7 . Hind-wing clothed at the base with ochreons hairs.

Underside. The ground-colour is much paler, especially in the hind-wing, in which the costal border of brown-pink is also much paler and less pronounced.

Antennæ of the male white above, buff below, except the apiculus which is brown on both surfaces. In the female, the antennæ are brown above, save for a few white scales at the end of the club; below buff, which colour spreads a little round the joints of the shaft and is visible from the upperside.

Head in both sexes brown above; in the male with white scales between the anteunæ, in the female with buff scales posterior to them.

Thorax and abdomen seal-brown above, the female with a few raw siemna scales at the end of the abdomen. Below the violaceous brown predominates, the legs remaining brown-pink.

Palpi below brown-pink.
2 ơ $^{\circ}, 2$ 오. Mubuku Yalley, E. Ruwenzori, $6000-13,000 \mathrm{ft} .13,15,21$. i. \& 1. iii. 06 .

Ceratrichia wollastoni, sp. n (Plate V. figs. 13 o ; 14, of.)
Expanse: of 31 mm ., \& 31 mm .
Nearest C. flava Hewitson in wing-shape, but paler in colour, with the fore-wing divided about equally into an apical dark half and basal lighter portion, while in flava the dark border is subparallel to the external margin from the tornus to vein 4 and then augulated along the vein and running obliquely to the costa.
of .-Upperside. Gamboge-yellow : fore-wing with the apical half rich seal-brown, this area terminating internally in an even curve from the tornus to mid-costa, which touches the end of the cell; a minute ray of dark scales stretches for 2 mm . from the base along the costal nervure ; the basal half of the costal margin very narrowly edged with brown: lind-wing with a patch of the dark brown at the apex of the wing and a few dark scales at the base of the internal margin.

Underside. Fore-wing: ground-colour the same as abuve, but much more orange towards the costal and external margins and paler towards the internal margin; the dark scaling covers the same area as above, but is much reduced in density, hardly traceable costalwards, and dusted with dull gallstone-yellow scaling at the external margin. At about 1.5 mm . from the external margin a small brown-bordered silver spot lies in interspaces $6,8,9,10$. On costal margin lies another, and one is situated in
interspace 7 at 4 mm . from the margin. Hind-wing: the gamboge-yellow extends only from the internal margin to the fold between veins $1 b$ and 2 , where it is separated by a dark line from the rest of the wing, which is ochreous-yellow. At about one-third from the base is a curved row of three (or four) ill-defined spots, in space $1 b$, the cell, space 7 , and sometimes 8 respectively; these spots are formed of more or less broken rings of brown scales surrounding a few pearly ones; beyond the middle is another parallel row of seven similar spots, there being one in each space from 16 to 7 , but the spot in space 4 is minute and rather displaced inwardly.

오.-Upperside. Fore-wing seal-brown ; an ochraceous spot at end of cell, 6 mm . from base of wing, another in space 2 nearer the outer margin ; minute spots situated as those on the underside of the male in spaces 3 to 7 , that in 4 very minute and sometimes absent. Hind-wing: the brown colour is confined to the basal, costal, and apical portions, leaving the larger area of the wings a pale ochre-yellow.

Underside. Fore-wing light sepia-brown, yellow towards the costa and apex and along the inner margin of the wing; the spots of the upperside are all traceable, and there are additional ones in spaces 8 and 9 . Hind-wing below a pale luteous, the spots and markings as in the male.

Hab. Uganda.
2 o $^{\circ}, 1$ ㅇ. Entebbe, Uganda. (E. A. Minchin.)
1 ó. Mubuku Valley, E. Ruwenzori. $5000-7000$ ft. 18. ii. 06.

## Padraona zeno.

Pamphila zeno Trimen, Trans. Ent. Soc. Lond. ser. 3, vol. ii. p. 179 (1861).
1 ó. Mokia, S.E. Ruwenzori. 3500 ft. 16. vi. 06.
2 of ơ, 2 여. Mubuku Valley, E. Ruwenzori. 6000-13, $000 \mathrm{ft} .11,15,17$. i. 06.
1 of. Ruwenzori. 5600 ft . (G. F. Scott Elliot.)
Artitropa comus.
Artitropa comus Cramer, Pap. Ex. iv. t. 391. ff. N, 0 (1;82).
1 of, $_{2}$ 여. Mubuku Valley, E. Ruwenzori. 6000-13,000 ft. 2, 22, 27. i. 06.
Baracus lepeletieri.
Hesperia lepeletieri Latreille, Enc. Méth. ix. p. 77\% (1823).
S ơ ơ . Mubuku Valley, E. Ruwenzori. $5000-7000 \mathrm{ft}$. 17. i. 06 . 6000-13,000 ft. 26. ii. 06.

Acleros mackenil.
Pamphila mackenii Trimen, Trans. Ent. Soc. 1868, p. 95, t. 5. f. 3.
1 o. Mubuku Valley, E. Ruwenzori. $5000-7000$ ft. 20. ii. 06.

Gegenes letterstedti.
Hesperia letterstedti Wallengren, Lep. Rhop. Caffr. p. 49 (1857).
1 ơ, 1 q. Mokia, S.E. Ruwenzori. 3500 ft. 16. vi. 06.
1 ó $^{2}$ Mubuku Valley, E. Ruwenzori. $5000-7000$ ft. 17. v. 06.
Gegenes occulta.
Pamphila occulta Trimen, P. Z. S. 1891, p. 103.
1 б. Mokia, S.E. Ruwenzori. 3500 ft . 17. v. 06.
Baoris lugens.
Pamphila lugens Hopffer, Bericht Verh. Ak. Berl. 1855, p. 643.
1 ó. Mokia, S.E. Ruwenzori. 3500 ft. 16. vi. 06.
Chapra mathias.
Hesperia mathias Fabricius, Ent. Syst., Suppl. p. 433 (1798).
2 © ơ, 2 후 ㅎ. Mokia, S.E. Ruwenzori. 3500 ft . 3, 20. v. \& 16, 18. vi. 06.
Parvara detecta.
Pamphila detecta Trimen, Trans. Ent. Soc. p. 141, pl. viii. f. 12 (1893).
¿ ठ ơ. Mokia, S.E. Ruwenzori. 3500 ft. 14. v. \& 27. vi. 06.
2 여. Mubuku Valley, E. Ruwenzori. $6000-13,000$ ft. 7, 9. ii. 06.
Parsara sp.
1 б. Mokia, S.E. Ruwenzori. 3500 ft. 27. vi. 06.
A similar specimen taken at Entebbe by Minchin.
Rhopalocampta forestan.
Papilio forestan Cramer, Pap. Ex. iv. t. 391. ff. E, F (1782).
5 б ठ . Mokia, S.E. Ruwenzori. 3500 ft. 16. vi. 06.
1 ơ, $^{1}$ ㅇ. . Mubuku Valley, E. Ruwenzori. $6000-13,000 \mathrm{ft} .13$. i. 06 . $15,000 \mathrm{ft}$.
16. ii. 06 .

One found "dead on snow."

## Rhopalocampta libeon.

Ismene libeon Druce, P. Z. S. 1875, p. 416.
Ismene unicolor Butler (nec Mabille), P. Z. S. 1895, p. 738.
Kasamaza's, Ruwenzori. 5300 ft . iv. or v. (G. F. Scott Elliot.)
Kivata, Ruwenzori. $6000-8000 \mathrm{ft}$. iv. or v. (G. F. Scott Elliot.)

## PLATE V.

## PLATE V.

Fig. 1. Gnophodes grogani E. M. Sharpe, ${ }^{\circ}$
2. " $\quad$ " E. M. Sharpe, 우
3. $\quad$ minchini Heron, ơ 143.
4. " $\quad$, forma n. magniplaga, Heron o , p. 144.
5. Ergolis pagensteckeri forma n. aurantiaca Heron, ${ }^{\circ}$, p. 154.
6. " " Suffert, ơ, p. 154.
7. Charaxes opinatus Heron, ơ, p. 156.
8. Gnophodes chelys Fab., ठ', fore-wing
9. ", diversa Butler, ơ, fore-wing $\}$ p. 143.
10. ", parmeno Doubl. \& Hew., ふ, fore-wing
11. Acroea amicitio Heron, ơ, p. 148.
12. Oxypalpus wollastoni Heron, ơ, p. 171.
13. Ceratrichia wollastoni
14. Heron, of

15 \& 16. Chioneigia leggei Heron, ô p. 173. $17 \& 18 . \quad$, ", Heron, 우 $\}$ p. 173.
$\left.\begin{array}{l}\left.\text { 19. Uranothauma falkensteinii } \begin{array}{l}\text { Dewitz, ơ } \\ \text { 20. }\end{array}\right\} \text { peritz, ㅇ }\end{array}\right\}$ p. 162.
$\left.\begin{array}{lrr}21 . & \text { Uelatorum Heron, ó } \\ \text { 22. } & \text { Heron, 우 }\end{array}\right\}$ p. 161.
$\left.\begin{array}{lcl}23 \& 24 . ~ H a r p e n d y r e u s ~ r e g i n a l d i ~ H e r o n, ~ o ̛ ~ \\ 25 \& ~ & \text { \& } 26 . & \text { Heron, } ¢\end{array}\right\}$ p. 159.
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LEPIDOPTERA RHOPAIOCERA
FROM MTRUWENZORI, झNTEBBE, AND LAGOS

